



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,382	11/14/2003	Aulis Peralá	111075.01	9593
25944	7590	09/27/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			KIM, YOON YOUNG	
			ART UNIT	PAPER NUMBER
			1723	
DATE MAILED: 09/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,382

Applicant(s)

PERALA, AULIS

Examiner

Yoon-Young Kim

Art Unit

1723

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1103.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed November 14, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitchell, U.S. Patent No. 1,459,845.

Regarding Claim 7, Mitchell discloses a filtering module made of filter cloth comprising a filtering layer composed of yarns in the transverse (#15) and the longitudinal (#16) directions, and an underside of the filter cloth is comprised of substantially parallel yarns that are thicker (#17) than the rest of the yarns of the cloth, and that the thicker yarns are placed at predetermined intervals defined by the other yarns of the filter cloth extending parallel thereto.

Regarding Claim 8, Mitchell discloses that the filter cloth is arranged such that the channels in the bottom of the cloth are directed according to a structure of the filtering module (Col. 4, Lines 103-126).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-4, 9, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baltzer et al., U.S. Patent No. 5,944,197 in view of Mitchell.

Regarding Claim 1, Baltzer discloses a solid-liquid separation filter cloth (Fig. 2, #10) composed of a plurality of yarns in the transverse (#22, 24, 26, 28) and the longitudinal (#12, 14, 16, 18) directions, the filter cloth comprising a filtering portion having a structure and density according to desired filtering characteristics for separating liquid from a mixture consisting of solids and liquid, whereby the liquid in the mixture passes through the filter cloth and the solids in the mixture remains on a surface of the filter cloth, and which filter cloth is further to be arranged against a filtering element (Fig. 4, #58) in a filtering apparatus. However, Baltzer does not disclose thicker yarns. Mitchell teaches a filter cloth which comprises substantially parallel yarns that are thicker (#17) than the rest of the yarns of the cloth, and that the thicker yarns are placed at predetermined intervals defined by the other yarns of the filter cloth extending parallel thereto. It would have been obvious to one of ordinary skill in the art to modify Baltzer with the

Art Unit: 1723

element of Mitchell in order to give an increased stiffness to the filter cloth (Col. 2, Lines 99-105).

Regarding Claim 3, Baltzer in view of Mitchell does not disclose the diameter difference of the yarns. One of skill in the art would by routine experimentation find the optimum diameter difference. It would have been obvious to one of skill in the art to make the diameter difference as so desired or required to optimize filtration.

Regarding Claim 4, Mitchell discloses that the thicker yarns in the underside of the filter cloth have the same direction as a weft (Fig. 1).

Regarding Claim 11, Baltzer discloses a solid-liquid separation filtering apparatus, comprising: a filtering module (Fig. 4, #52, 54, 56); and a filtering element (#58), wherein the filtering module is arranged on a filtering element as a filtering surface where liquid is separated from a mixture consisting of solids and liquid where the filtering module is made of a filter cloth filter cloth (Fig. 2, #10) composed of yarns in the transverse (#22, 24, 26, 28) and the longitudinal (#12, 14, 16, 18) directions whereby the liquid in the mixture passes through the filter cloth and the solids in the mixture remains on a surface of the filter cloth. However, Baltzer does not disclose thicker yarns. Mitchell teaches a filter cloth which comprises substantially parallel yarns that are thicker (#17) than the rest of the yarns of the cloth, and that the thicker yarns are placed at predetermined intervals defined by the other yarns of the filter cloth extending parallel thereto. It would have been obvious to one of ordinary skill in the art to modify Baltzer with the element of Mitchell in order to give an increased stiffness to the filter cloth (Col. 2, Lines 99-105).

Regarding Claim 12, Mitchell discloses that the filter cloth is arranged such that the channels in the bottom of the cloth are directed according to a structure of the filtering module (Col. 4, Lines 103-126).

Regarding Claims 9 and 13, Baltzer in view of Mitchell discloses that the filtering module is arranged such that the channels in the bottom of the cloth (Mitchell, Col. 4, Lines 103-126) are directed such that the channels lead the filtered liquid to openings in the filtering element (Baltzer, #58).

6. Claims 2, 5, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baltzer in view of Mitchell as applied to Claim 1 above, and further in view of Pedersen, U.S. Patent No. 4,022,596.

Regarding Claim 2, Baltzer in view of Mitchell discloses that the thicker yarns are monofilaments (Mitchell, #17) but does not disclose multifilaments. Pedersen teaches a filter cloth comprising multifilaments (Col. 4, Lines 61-65). It would have been obvious to one of ordinary skill in the art to modify Baltzer in view of Mitchell with the element Pedersen in order to add bulk density (Col. 4, Lines 61-65).

Regarding Claims 5 and 14, Baltzer in view of Mitchell does not disclose that the yarns are heat-shrinkable. Pedersen teaches yarns which are heat-shrinkable (Col. 2, Lines 28-37). It would have been obvious to one of ordinary skill in the art to modify Baltzer in view of Mitchell with the element Pedersen for subsequent formation of the yarns into the desired final configuration of treating material (Col. 2, Lines 32-37).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baltzer in view of Mitchell as applied to Claim 1 above, and further in view of Oksanen et al., U.S. Patent No. 6,787,492 B2.

Regarding Claim 6, Baltzer in view of Mitchell does not disclose batt needed to the filtering portion. Oksanen teaches batt needed to the filter cloth (Col. 4, Lines 24-30). It would

Art Unit: 1723

have been obvious to one of ordinary skill in the art to modify Baltzer in view of Mitchell with the element of Oksanen in order to provide a protective layer (Col. 4, Lines 24-30).

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell in view of Pedersen.

Regarding Claim 10, Baltzer in view of Mitchell does not disclose that the yarns are heat-shrinkable. Pedersen teaches yarns which are heat-shrinkable (Col. 2, Lines 28-37). It would have been obvious to one of ordinary skill in the art to modify Baltzer in view of Mitchell with the element Pedersen for subsequent formation of the yarns into the desired final configuration of treating material (Col. 2, Lines 32-37).

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-2, 7, and 11 are rejected under the judicially created doctrine of double patenting over Claims 1-3 of U. S. Patent No. 6,719,148 B2 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter,

Art Unit: 1723

as follows: a filter cloth whose underside comprises substantially parallel, additional yarns that are thicker than the rest of the yarns of the cloth, substantially parallel channels being formed between the yarns, wherein filtered liquid passed through the cloth is allowed to flow in the direction of the surface of a filtering element between the filtering portion of the cloth and the surface of the element.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA.1968). See also MPEP § 804.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700